



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
726 MINNESOTA AVENUE  
KANSAS CITY, KANSAS 66101

JDB

File:	Syntex Verona
ID #	NUD007452154
Imp:	3.5 on #1
Other:	Communications
	11-7-91

0751

NOV 07 1991

Mr. Gary Pendergrass  
Syntex Agribusiness, Inc.  
P.O. Box 1246  
Springfield, Missouri 65801



40032245  
SUPERFUND RECORDS

Dear Mr. Pendergrass:

Re: Syntex Agribusiness, Inc., Verona, Missouri  
Ground Water Remedial Investigation Report

The Environmental Protection Agency (EPA) has completed review of the ground water Remedial Investigation (RI) Report prepared for your facility near Verona, Missouri. In general, the RI report requires expansion of several areas in order to adequately serve as a basis for remedy selection. The following general comments should be addressed in a revised submittal:

1. The EPA, as a matter of national policy, is charged with conducting all baseline risk assessments performed to analyze risk associated with National Priority List (NPL) sites. The EPA will use information included in the exposure assessment and toxicity assessment to develop a characterization of the potential risks of adverse health or environmental effects at this site.

2. Limited data have been presented to support the statements in the text concerning site geology and hydrogeology, concentrations of contaminants and their distribution on the site, contaminant migration pathways, and the fate of the contaminants. At a minimum, the report must include: boring logs and well installation reports; geologic cross sections; all measured ground water elevations; ground water contour maps for each measurement event; stream velocity study data; all aquifer test data; all monitoring well sampling data; tabular summaries of the monitoring well sampling data presenting actual values, not just averages for each sampling event; and trend plots of the contaminant concentration for each monitoring well.

3. Section 2.1 Well Descriptions - The report states that Wells 6 and 7 were determined to be the best situated to intercept ground water containing contaminants; Wells 2 and 3 were located to evaluate contamination migrating from the

RECYCLE

irrigation area; and that Wells 4,5,8,9 and 10 are in areas unlikely to detect contaminants migrating from the facility; however, no evidence is provided to support these interpretations. Ground water contour maps and supporting quarterly elevation measurements must be included in the report to support upgradient versus downgradient statements.

4. **Section 3.4 Ground Water Hydrogeology** - Three distinct ground water systems have been identified at the site. Reportedly, these include: the deep bedrock aquifer, the shallow bedrock aquifer, and the Spring River alluvial aquifer. Several well clusters exist onsite from which water levels have been obtained to provide information on the connection between the alluvial and shallow bedrock aquifers. The interconnection of these aquifers must be assessed in the report.

5. **Section 3.4.4 Evaluation of Ground Water Analytical Results** - It is not appropriate to delete contaminants of concern from consideration on the basis of their absence in upgradient (background) wells. Ground water samples collected from several of the downgradient wells have shown contaminant levels above established MCLs. The report should identify these high concentrations and define the maximum extent of contamination.


6. **Section 3.6 Demography** - This section suggests that no residential water wells are located in the Spring River flood plain downgradient of the site. The EPA has identified at least four residential water wells within one mile of the site. The exposure assessment should be modified to include these known downgradient residential wells.

7. **Section 4.0 Fate and Transport** - The report cites a "paucity" of information regarding potential contaminant plumes; however, ground water monitoring data have been collected on a quarterly basis for over five years at this site. The data should be sufficient for the development of a model with respect to ground water movement and time of travel calculation.

The RI report should be revised to address the general comments provided above, and resubmitted to EPA and the State. Please contact the project manager for the Syntex Verona site, Mr. Mark Bogina, at (913) 551-7528, to discuss a schedule for submittal of a revised report.

Should you have any questions regarding these comments or future activities, please contact Mark Bogina.

Sincerely yours,

  
David A. Wagoner  
Director  
Waste Management Division

cc: Linda James, MDNR